

CAREER-DEVELOPMENT PLAN

1 May 1981

Engineering Division/Processing
Office of Data Processing
(ED/P/ODP)

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Contact:
Extension:

CAREER-DEVELOPMENT PLAN
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Engineering Division/Processing
 Office of Data Processing

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A. PURPOSE

To ensure that the Engineering Division (ED/P/ODP) has the proper mix of skilled employees to perform its mission and functions.

B. POLICY

This plan and its implementation conform to ODP's basic personnel policy. This policy states that each individual will be given equal and reasonable opportunity for employment and career advancement, consistent with the individual's abilities and performance, and the needs of the Agency, without regard to the individual's race, color, religion, sex, age, national origin, or handicap. Promotions and assignments will be made on a competitive basis. ODP will continue its tradition of providing developmental opportunities and support to employees who demonstrate potential and drive for more responsible assignments.

C. ENGINEERING DIVISION RESPONSIBILITIES

Engineering Division is responsible for the reliability and stability of ODP computer and terminal hardware equipment and ensures efficient utilization of existing ODP computer systems to meet current and future customer requirements. Engineering Division also is responsible for the acquisition, configuration, and maintenance of all ODP computer and terminal equipment. Further, Engineering Division serves as a focal point for Processing's ADP budget and, as such, monitors projects and initiates actions in support of the current, planning, and out years' budget activities.

To fulfill its mission and to provide this variety of services requires a staff of technical and professional personnel with a mix of skills and experience. Engineering Division, with [redacted] ranging in grade from GS-06 to GS-16, is organized functionally into four Branches. Each Branch has its distinct and vital mission and the skilled personnel to perform its mission (reference Figure 1, "Engineering Division Organization Chart").

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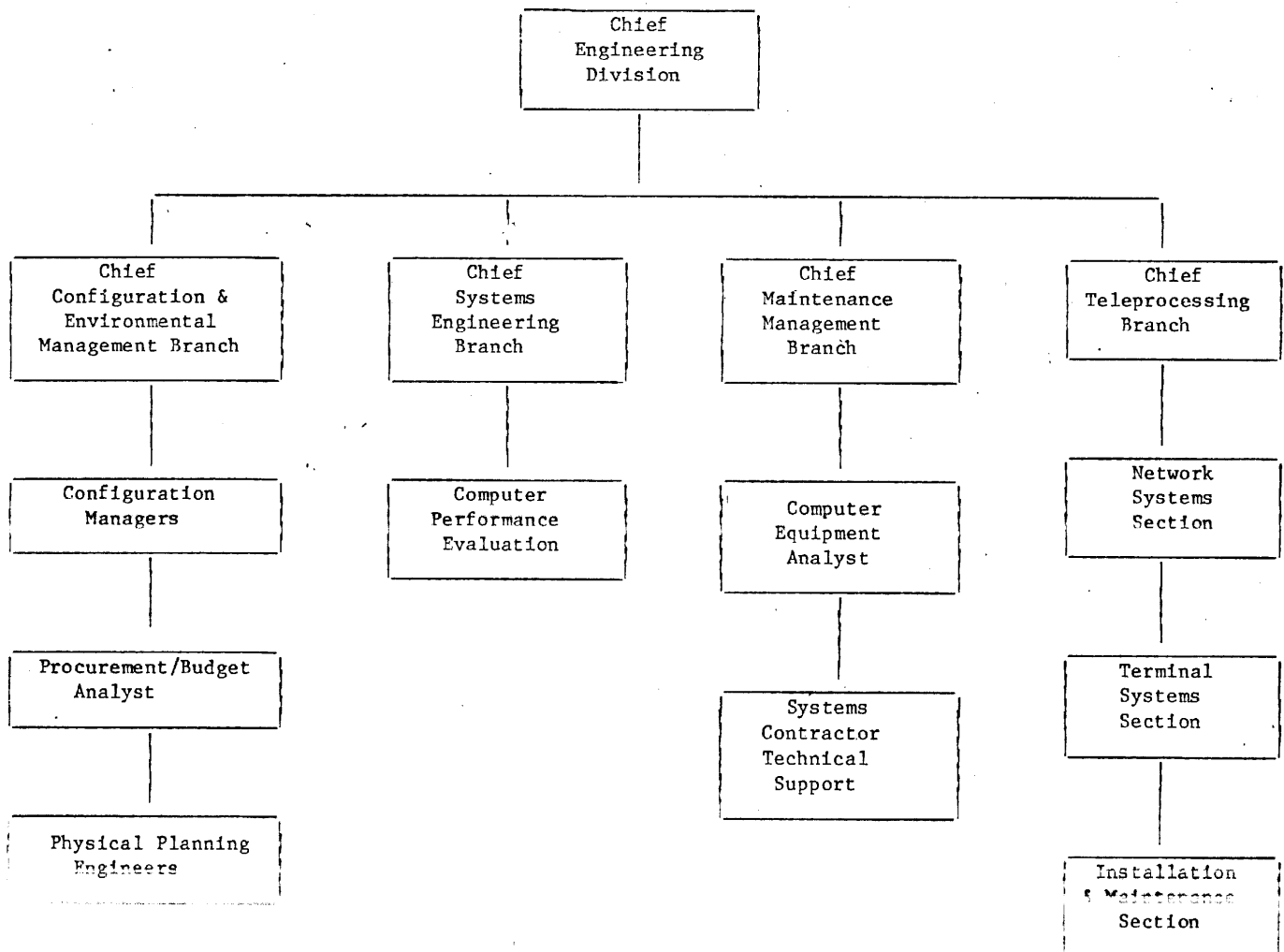


Figure 1. Engineering Division Organization Chart
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D. BRANCH RESPONSIBILITIES

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1. Configuration and Environmental Management Branch (CEMB)

CEMB is responsible for all activities in support of configuration, environmental, and procurement management of ADP equipment in the ODP computer centers. CEMB monitors Processing's budget and prepares budgetary documentation for current and future fiscal years. CEMB has [] in grades GS-07 to GS-14, and one contractor. The Branch is functionally divided into three Sections--Configuration Management, Environmental Management, and Procurement Management--each with a unique staffing requirement. STAT

a. Configuration Management Section

This Section:

- Coordinates with all ODP Divisions to annually publish an integrated schedule of all activities that will impact ODP computer centers.
- Manages execution of the approved plan.
- Manages and plans all configuration changes in ODP computer centers, and plans and installs minicomputer systems in coordination with customer offices.
- Manages and updates the T-Bar Automated Switch Network, backup options, and all aspects of direct-access storage device (DASD) management.
- Provides future planning to meet customer online-storage requirements.

Expert knowledge of the multivendor environment, hardware, project management, and ODP configuration is required along with skills in oral and written communication. Strong knowledge of the VM Interactive System (primarily RAMIS, EDIT, and batch facilities) is required to update and maintain ongoing projects and control DASD activities.

b. Environmental Management Section

This Section:

- Coordinates all activities concerned with the installation and/or relocation of computer systems/equipment in ODP computer centers.
- Is responsible for space management and planning within, or in addition to, ODP computer centers.
- Coordinates utility support and all aspects of prevention and detection to achieve physical security of equipment and personnel.

Technical knowledge of hardware physical planning, obtainable in most cases only by years of experience, is required along with strong knowledge of utility support systems, space-management techniques, and a basic knowledge of the VM Interactive System.

This Section:

- Coordinates the acquisition, continuation, or release of Processing's ADP equipment, services, and maintenance contracts.
- Monitors Processing's annual ADP budget activities and provides data for planning future budgets.

Knowledge of the VM Interactive System, particularly RAMIS and the batch system facilities, is required to utilize the online word processing and automated database management facilities. Further, a good understanding of Agency and Government procurement processes and regulations is required.

2. Systems Engineering Branch (SEB)

SEB is responsible for conducting computer-performance evaluation (CPE) studies for current and projected ODP computer services, reporting on current-services performance and capacity, and coordinating planning efforts to meet future computer system requirements. SEB has in grades GS-12 to STAT GS-15, and contractor support.

For the purpose of focusing responsibility and providing required expertise, SEB's functions are divided into four major areas:

- Services related to VM.
- Services related to the Ruffing Computer Center's batch processing (including the OCR online program).
- Services related to database management (primarily GIMS).
- Services provided to the Directorate of Operations (DO).

An experienced CPE analyst, assigned to each of these major areas, is responsible for monitoring day-to-day performance, conducting optimizing exercises, and developing plans for future requirements. Further, each analyst participates in other ad hoc CPE studies, as required, and provides input to the annual Processing/ODP Computer System Plan produced by the Branch Chief. Two part-time employees prepare weekly and quarterly performance reports and maintain the Office's computer system capacity and performance database. Contractors assist in preparing ad hoc CPE studies, as required.

The CPE analyst should have at least the educational equivalent of a bachelor's degree in computer sciences, engineering, or mathematics, with a minimum of 4 years' work experience in the computer field, with emphasis on operating system software and hardware operating systems.

3. Maintenance Management Branch (MMB)

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MMB is responsible for providing technical expertise to Agency components concerning hardware tracking, problem analysis, system tracking, vendor management intervention, and contractual requirements. In support of these objectives, MMB:

- a. Reviews hardware-failure/recovery procedures and makes recommendations to improve system availability.
- b. Resolves vendor-Agency conflicts when multiple vendors are involved.
- c. Manages acceptance procedures for new computer equipment to ensure reliability specifications.
- d. Maintains statistics and general management reports on mean-time-between-failure (MTBF), mean-time-to-repair (MTTR), and availability of systems.
- e. Monitors vendors to ensure system stability and maintenance coverage for dollar savings, where applicable.
- f. Maintains complete equipment tracking and statistical databases to ensure equipment availability and vendor intervention when equipment is substandard.

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MMB has in grades GS-11 to GS-14, and eight contract employees whose activities range from data entry to programming and analytical support.

Experience in data processing is mandatory for employees applying for MMB positions. MMB personnel must have expert knowledge of ODP's interconnected mainframes, other Agency computer hardware components, operating principles, peripheral equipment requirements, and software interactions. Also required is working knowledge of ODP's organizational structure and an understanding of maintenance contracts designed to direct planning and problem-solving task forces.

4. Teleprocessing Branch (TB)

The Teleprocessing Branch is responsible for managing ODP's remote data terminal network. This includes planning for network capacity, technical network enhancements, hardware selection, installation of data terminals and controllers, and controller and terminal software. A combination of professional/technical skills is needed for this assignment; grades range from GS-7 to GS-15. The Branch is functionally divided into three sections--Network System Section, Installation and Maintenance Section, and Terminal System Section--each requiring distinct personnel qualifications.

a. Network Systems Section

This Section plans for and provides network control devices that support current and long-term remote data terminal requirements. Services include

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equipment selection, integration of the computer centers' environment, and software development along with its installation and maintenance. Essential activities are pre-production testing and quality assurance of new or enhanced systems, and the training and indoctrination of computer center operations' personnel. This Section also is charged with diagnosis and fault-repair of problems at the system, application, and controller levels. Personnel require detailed knowledge of computer center configurations, applications software, VM Interactive System, MVS/JES3, JCL, ODP terminals, and COMTEN hardware and software. Additionally, for senior personnel engaged in planning and software development, proficiency in project management is required, along with expert, professional, current knowledge of IBM system software, COMTEN hardware and software, and data communications equipment, standards, and protocols. Proficient communications skills are required for personnel in this Section.

b. Installation and Maintenance Section

This Section:

- Manages and coordinates installation of ODP's standard remote-data-terminal devices.
- Establishes and administers procedures for requesting data terminal installation and relocation.
- Coordinates all supporting actions related to terminal requests; support actions include site surveys, security authorizations, arranging for communications and power lines with the Office of Communications (OC), and coordinating with the ADP Control Officer(s) of the requesting component.
- Is responsible for ODP's data terminal inventory, which includes receiving, testing and inspecting, storing, and installing terminals.
- Performs diagnostic and fault isolation on reported terminal problems, which involves coordination with OC, multivendor maintenance personnel, and the user community.
- Manages the activities of six resident Delta Data customer engineers, and other terminal vendor-maintenance personnel when on site.

Personnel in this Section need thorough knowledge of ODP's data terminal network, require the ability to use data communications test and monitor equipment, must possess expertise in the use of VM, primarily RAMIS, and JES/RJP systems, and also must have proficiency in communications skills.

c. Terminal Systems Section

This Section:

- Manages programs for the acquisition of standard and special-purpose terminals and communicating end-user devices; these programs include

hardware and software design, the specification and selection of equipment, procurement, and device integration into ODP main systems or unique user systems.

- Manages enhancements to existing terminals and end-user devices.
- Coordinates with DC on emanations testing and TEMPEST modifications to terminal equipment.
- Performs fault isolation and repair on high-speed data-line circuitry.

For senior positions, expertise in electronics engineering and programming intelligent terminals is required, along with detailed knowledge of data communications equipment, standards, and protocols. Sound management skills and good comprehension of Agency procurement rules and regulations are essential, along with proficiency in communications skills.

E. PLAN TO SATISFY REQUIREMENTS

1. Recruitment

ED seeks technically competent individuals from within ODP. Most of the positions are filled from within ODP; however, employees with some specialized skills are acquired from within and outside the Agency. Personnel with experience or formal training in the areas of computer hardware, communications networks, or computer performance evaluation are preferred candidates.

2. Indoctrination

In indoctrinating its new employees, ED provides an overview of the mission and functions of each Branch as well as a survey of the nature of the work done throughout the Division. Further, new employees are given a description of the grade structure and requirements for entry-level positions, and an overview of leave, training, and career development policies. New employees are scheduled for the "ODP Orientation" program, and are advised that a copy of the ODP Personnel Handbook is available to all employees.

3. Training

ED utilizes ODP's training facility, the Agency's training courses, and externally available training and technical seminars. Employees attend courses that are directly related to their positions as well as those considered career enhancing. ED maintains an ongoing training effort, a Professional-Development Program, which is considered necessary for employees to keep current with state-of-the-art computer developments.

Reference Figures 2 through 6 for courses made available to ED personnel. Each figure, one each for ED Branches (CEMB, SEB, MMB, and TB) and one for Division and Branch Chiefs, lists the training courses available to ED personnel, based on grade level and job assignment.

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Configuration and Environmental Management Branch (CEMB/ED/P/ODP)

<u>GS 07-09</u>		<u>GS 10-11</u>		<u>GS 12-13</u>	
Training	Assignment	Training	Assignment	Training	Assignment
Basic JCL	Computer Technician	Intermediate PL/I	Computer Equipment Specialist	Basic Statistical Concepts	Computer Equipment Specialist
Basic VM	Computer Technician	CAM Control Language	"	Briefing Techniques	"
Intermediate JCL	Computer Equipment Specialist	RAMIS File Design	"	CIA Program & Budget Process	"
Intermediate VM	"	RAMIS Records Management	"	Mid-Career	"
Basic PL/I	"	System Analysis Workshop	"	Career Counseling	"
BATCHMON	"	Basic Safety and Health	"	Effective Writing	"
Documentation Standards	"	CIA Financial System	"	Performance Appraisal	"
SCRIPT	"	Procurement in Federal Govt.	"	Fundamentals of Supervision and Management	"
RAMIS Report Writing	"	Project Officer in Contract Cycle	"	EEO Seminar	"
RAMIS External Files	"	Project Management	"	GUIDE/SHARE	"
Trends & Highlights	"	Project Implementation	"	Distributed Power Systems	"
CIA Today & Tomorrow	"	GUIDE/SHARE/DMS User Meetings	"	Sole Source Evaluation	"
Federal Procurement Process	"	Assembler Language Coding	"	Procurement Seminars	"
		Communications Skills	"		

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Figure 2. CEMB Professional-Development Program

Systems Engineering Branch (SEB/ED/P/ODP)

Training	GS 12-13	Assignment
MVS Introduction		Computer Performance Analyst
MVS Structure and Logic		"
MVS Measurement and Tuning		"
Planning and Controlling an MVS System		"
JES3 Services and System Interfaces		"
CICS Concepts and Facilities		"
VM Structure and Logic		"
Computer science and operations research courses given by universities and professional organizations, such as:		
Analytic Modeling Techniques		Computer Performance Analyst
Numeric and Statistical Methods Applied to Computer Performance Evaluations		"
Simulation Techniques		"
Courses on Operating Systems, Database Management Systems, Telecommunications Systems, and Computer Architecture		"

Figure 3. SEE Professional-Development Program

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<u>GS 09-10</u>		<u>GS 11-12</u>		<u>GS-13</u>	
Training	Assignment	Training	Assignment	Training	Assignment
Project Mgmt.	Computer Technician	EEO Seminars	Computer Equipment Specialist	Performance Evaluation	Computer Equipment Specialist
Project Implementation	"	GUIDE/SHARE	"	Appraising Maintenance Effectiveness	"
Writing Better Reports	"	Management By Objectives	"	Reliability Engineering	"
GUIDE/SHARE	"	Effective Writing	"	GUIDE/SHARE	"
Fundamentals of Supervision and Management	"	Technical Writing	"	Mid-Career	"
Leadership Styles and Behavior	"	Minicomputer Orientation	"		
RAMIS Report Writing	"	Computer Contract Negotiation	"		
Basic VM	"	ADP Procurement in the Federal Government	"		
SCRIPT	"	Systems Analysis Workshop	"		
Interactive System Concepts	"	Project Officer in the Contract Cycle	"		
Tell-A-Graph	"	Organization & Mgmt. of Preventive Maintenance Program	"		
RAMIS Record Mgmt.	"	Maintenance Planning, Scheduling, & Control Systems	"		
Hardware/Software for Ops Personnel	"	Maintenance Mgmt.	"		
File Design	"				

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<u>GS 07-09</u>		<u>GS 10-11</u>		<u>GS 12-13</u>	
Training	Assignment	Training	Assignment	Training	Assignment
Basic JCL	Computer Equipment Technician	Project Management	Computer Equipment Specialist	NCC	Computer Equipment Specialist
Basic VM	Computer Equipment Specialist	Project Implementation	"	Mid-Career	"
Intermediate JCL	"	ADP Procurement	"	Telecommunications Conferences	"
Intermediate VM	"	COMTEN Concepts & Facilities	"	Emulation Internals	"
BATCHMON	"	COMTEN Emulation	"	CMS Internals	"
SCRIPT	"	COMTEN CMS	"	Minicomputer Courses	"
Interactive System Concepts	"	Assembly Language	"	Advanced Telecommunications	"
RAMIS Report Writing	"	COMTEN Codel	"	Microcomputer Course	"
Introduction to Communications	"	Tell-A-Graf	"	Performance Evaluation	"
Data Communications	"	Introduction to S/370	"	Project Officers in the Contract Cycle	"
		MVS/JES3 Concepts/ Facilities	"	MVS/JES3 Courses	"
		CP/CMS Concepts/ Facilities	"	CP/CMS Courses	"

Division and Branch Chiefs (ED/P/ODP)

GS 14-15	
Training	Assignment
Senior Management Seminars	Division Chief
Advanced Intelligence Seminar	Branch Chiefs
Survey of Financial Management	"
External Management Seminars	"
MBO Workshops	"
GUIDE/SHARE COMTEN/Other User Meetings	"

Figure 6. Management Professional-Development Program

F. SKILL ASSESSMENTS

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Division employees' skill levels are assessed annually via the Agency's Performance Appraisal Report (PAR). PAR is a reflection of the supervisor's perception of employee's performance, readiness for advancement, and progress toward goals stated in the employee's Advanced Work Plan (AWP). The supervisor's comments play an important role in the Division's competitive ranking process. Processing annually ranks all Division personnel by grade. Promotion recommendations are made in part from the ranking process.

G. EMPLOYEE COUNSELING

Counseling is available to any employee at any time from within ODP, Directorate of Administration, and elsewhere in the Agency.

1. Within ODP

- a. Immediate supervisor
- b. Branch Chief
- c. Division or Staff Chief who also serves as the employee's representative on the Processing Evaluation Panel
- d. ADD/P, who is Chairman of the Processing Evaluation Panel
- e. DD/P, who is the employee's MZ Board representative
- f. ODP Career-Development Officer
- g. ODP Personnel Officer
- h. Deputy Director of ODP
- i. Director of ODP

2. Within the Directorate of Administration (DA)

Career Management Office

3. Elsewhere in the Agency

The Office of Personnel (OP) has counselors assigned to each of the Agency's Directorates. They can advise an individual on what openings are available throughout the Agency, and also can give advice and guidance on how to apply for various jobs throughout the Agency. The Office of Medical Services (OMS), Psychological Services Staff (PSS), is available for counseling on career development, and administers a series of tests that may assist employees identify their specific skills and abilities.

Equal Employment Opportunity (EEO) and Grievance Counselors are available throughout the Agency. The ODP Executive Officer is the ODP EEO Officer and

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Grievance Counselor. Employees are not required to deal with their component EEO Office. ~~Approved For Release 2005/08/22 : CIA-RDP83T00573R000200090026-6~~ Employees must deal with the Office of Grievance Counselor on grievance matters.

Counseling must not be confused with grievance processing, although the channels for each are somewhat similar. The point to be made in counseling is that it is at the employee's or the supervisor's option, as needed. Informal counsel, advice, guidance, tutelage, and exchange of views should occur on a day-to-day basis. Formal counsel is a necessary part of advance work planning, performance reviews, and career planning, and should be held at least two or three times per year. The employee has every right to expect the supervisor to provide positive comment on his/her career development, to frankly appraise his/her promotion possibilities, and to provide current feedback, both positive and negative. In cases where performance is not satisfactory, special sessions may be arranged to determine problems and to solve them, if possible. Such sessions will be recorded and discussed with the employee.

H. PLACEMENT/ASSIGNMENT

Job assignments within the Division's various Branches are made based on the supervisor's perception of the individual employee's ability to perform at a certain skill level. The type and level of skill possessed by an employee, coupled with his/her growth expectations, usually is the determining factor.

Reassignments within the Division (from Branch to Branch) are handled by the Division Chief after consultation with the Branch Chiefs and employee.

I. CAREER PATHS

ED personnel have utilized their training and expertise to progress to new challenges. Figure 7, "Career-Path Matrix," illustrates the various positions employees have acquired or are capable of acquiring.

J. ROLE OF SUPERVISOR

ED Supervisors are the focal points for PARs, which include an assessment of employee potential and counseling. Supervisors are equipped for these tasks through the training courses prescribed through ED's Professional-Development Program (reference E-3, "Training," and Figures 2, 3, 4, 5, and 6). Training includes such courses as Effective Writing, Leadership Styles and Behavior, and Counseling Skills. In addition, the Division regularly distributes various management-oriented papers to all supervisors.

To encourage a continuing check and balance on employee-supervisor relations, the Division and Branch Chiefs employ an open-door policy. Employees may, at any time and on any topic, approach his/her Branch Chief or the Division Chief. This policy has been helpful in equitably resolving most problems.

The Division Chief is the Division representative who serves on the Processing Evaluation Panel. Input to the Panel is solicited from the Branch Chiefs.

Engineering Division/
Processing
Office of Data Processing

FROM:	TO:	Secretary	Configuration Manager	System Analyst	Operations Division	Systems Programmer	Computer Equipment Analyst	Terminal Installation & Relocation Section	Procurement Budget Analyst	Senior Physical Planning Engineer	Branch Chief	Rotational Assignment	Agency Transfer
Clerk		X			X			X					
Secretary					X			X	X				
Computer Equipment Analyst			X	X	X						X		X
System Programmer				X							X	X	X
Terminal System Section				X		X					X	X	X
Installation and Maintenance Section					X		X				X		
Network System Section				X	X	X	X						
Physical Planning Engineer					X		X			X	X		
Computer Specialists (Contracts)					X		X				X	X	
Performance Evaluation Analyst						X					X	X	X
Senior Physical Planning Engineer					X						X	X	